

collected at 20 MHz over a temperature range of 20-60°C. Each sample was then removed from the NMR and heated at 85°C for 15 minutes to induce thermal denaturation of the HSA.

B2 Subsequently, the sample was returned to the NMR and T_1 data was collected at this higher temperature. See Table 1 below.--

Please replace the paragraph beginning at page 59, line 19 with the following rewritten paragraph:

B3 --As Table 1 shows, after thermal denaturation of the three HSA-containing solutions, the sample that also contained the HSA-specific contrast agent MS-325 demonstrated a significant decrease in the observed R_1 (a loss of $26.7 \text{ mM}^{-1} \text{ sec}^{-1}$) during denaturation of the HSA as measured from immediately before denaturation (56.2°C) to immediately after denaturation (85°C). However, the sample that contained the non-specific contrast agent Gd-DTPA, even at a concentration of three times that used for the MS-325 sample, showed little change in R_1 (a loss of only $0.1 \text{ mM}^{-1} \text{ sec}^{-1}$) during denaturation. This indicates that Gd-DTPA does not bind to either native or denatured HSA.--

Please replace the paragraph beginning at page 60, line 24 with the following rewritten paragraph:

B4 --The phantoms were then heated in a circulating water bath with additional T_1 -weighted MRI scans obtained over time. As the temperature increased, the phantoms containing MS-325 remained much brighter (less signal intensity loss as measured in % ROI (region of interest)) than the phantoms containing Gd-DTPA or 4.5% HSA alone. See Table 2 below.--

Please replace the paragraph beginning at page 61, line 15 with the following rewritten paragraph:

B5 --As the phantoms were heated above 50-60°C, they became opaque in color, corresponding to the thermal denaturation of the HSA. At the same time, as Table 2 shows, a dramatic loss of signal intensity was observed for the phantom that contained MS-325 (76% loss in intensity). However, the phantoms that contained Gd-DTPA or HSA alone, produced only a modest change in signal intensity. The Gd-DTPA phantoms, even at a Gd-DTPA concentration

B5 that was three times that used for the MS-325 phantoms remained as constant dark images during the MRI scans after thermal denaturation.--

Please replace the paragraph beginning at page 62, line 20 with the following rewritten paragraph:

B6 --Absolute ethanol was then titrated to each of the samples. T_1 data (and thus R_1 data ($=1/T_1$)) was collected at 20 MHz and 37°C after each addition of ethanol. See Table 3 below.--

Please replace the paragraph beginning at page 63, line 28 continuing to page 64, line 5 with the following rewritten paragraph:

B7 --As Table 3 demonstrates, during ethanol ablation of the 4.5% HSA solutions, the sample containing MS-325 showed a significant decrease in the observed relaxivity ($33 \text{ mM}^{-1} \text{ sec}^{-1}$) and thus, allowing for the detection of ethanol induced necrosis. However, the sample containing Gd-DTPA (even at almost four times the concentration of MS-325) shows only a minor change in observed relaxivity ($0.3 \text{ mM}^{-1} \text{ sec}^{-1}$).--

In the claims:

Please cancel claims 36-63.

Please add new claims 64-83 as follows:

-- 64. (new) A method for monitoring treatment of a tissue comprising HSA in a patient, said method comprising:

B8 a) administering a contrast agent to the patient, the contrast agent comprising a physiologically compatible metal chelate complexed to a paramagnetic metal ion, the chelate covalently bound to a structure : $-(L)_m\text{-SDTBM}$,

wherein L is a physiologically compatible linker and wherein m can be 0 to 4;

mcg